

## Fire Marshal – Course Syllabi

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### FM: Managing the Fire Prevention Program

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#### Unit 1: Introduction

Topic 1: Orientation and Administration .....	1:00
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#### Unit 2: The Role of the Fire Marshal

Topic 1: The Role of the Fire Marshal .....	1:00
Topic 2: Administrative Services and Duties .....	2:00
Topic 3: Human Resource Management .....	1:30
Topic 4: Community and Government Relations .....	1:00
Topic 5: Inspections and Investigations .....	0:30
Topic 6: Risk Management .....	0:30
Topic 7: Professional Development .....	0:30
Topic 8: Regulatory Programs .....	0:30
Topic 9: Fire and Life Safety Education .....	1:00

#### Unit 3: Developing a Professional Development Program

Topic 1: Professional Development Needs .....	1:30
Topic 2: Professional Development Programs .....	1:30
Topic 3: Professional Development Evaluation and Forecasting .....	0:30

#### Unit 4: Employee/Management Relations

Topic 1: Employee/Management Relations .....	1:30
Topic 2: Communication and Decision-Making .....	1:00
Topic 3: Conflict Resolution .....	0:30

#### Unit 5: Developing and Adopting Code and Jurisdictional Standards

Topic 1: CBS Code Adoption Process .....	1:30
Topic 2: Adoption and Modification at the Local Level .....	3:00
Topic 3: Maintenance at the Local Level .....	0:30

#### Unit 6: Developing and Administering an Inspection Program (FM 4-1)

Topic 1: Inspection Program Elements .....	1:30
Topic 2: Inspection Program Considerations .....	2:00
Topic 3: State-Mandated Inspections .....	0:30
Topic 4: Documents and Citations .....	0:30
Topic 5: Special Inspections .....	0:30
Topic 6: Exterior Hazard Abatement in the Wildland Urban Interface .....	0:30

#### Unit 7: Developing and Administering a Plan Review Program

Topic 1: Plan Review Program Development .....	0:30
Topic 2: Plan Review Resources .....	0:15
Topic 3: Plan Review Management .....	0:30

#### Unit 8: Developing and Administering Interpretation Processes, Alternative Compliance, and Appeals Programs

Topic 1: Interpretation .....	0:30
Topic 2: Alternative Compliance Methods .....	1:00
Topic 3: Appeals Process .....	1:00

## **Unit 9: Developing and Administering a Program for Permits, Licenses, and Certificates of Occupancy**

Topic 1: Permits, Licenses, and Certificates of Occupancy .....	1:30
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## **Unit 10: Developing and Administering a Records Retention Program**

Topic 1: Types of Records Retention Systems .....	1:30
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## **Unit 11: Developing and Administering a Hazard Complaint Reconciliation Process**

Topic 1: Developing a Process for Reconciling Hazard Complaints.....	1:30
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## **Unit 12: Developing and Administering an Inter-Agency Coordination Program**

Topic 1: Administering an Inter-Agency Coordination Program.....	1:30
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## **FM: Public Relations, Education and Fire Investigation Programs**

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### **Unit 1: Introduction**

Topic 1: Orientation and Administration .....	1:00
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### **Unit 2: Community Leadership**

Topic 1: Community Leadership and Interaction.....	2:00
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### **Unit 3: Developing and Implementing a Public Fire and Life Safety Education Program**

Topic 1: Developing a Public Fire and Life Safety Education Program .....	1:00
Topic 2: Developing a Safety Proposal Presentation .....	4:00
Topic 3: Creating a Comprehensive Public Fire and Life Safety Report.....	2:30

### **Unit 4: Fire Investigation Overview**

Topic 1: Terminology .....	0:30
Topic 2: Fire Investigation Types .....	2:00
Topic 3: Developing Administrative Policies.....	2:00
Topic 4: Resources .....	1:30
Topic 5: Reports and Analysis.....	2:00

### **Unit 5: Fire Origin and Cause Investigations**

Topic 1: Fire Marshal Role in Fire Origin and Cause Investigations .....	1:00
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### **Unit 6: Criminal Fire Investigations**

Topic 1: Fire Marshal Role in Criminal Fire Investigations.....	2:30
Topic 2: Criminal Fire Investigation Considerations .....	2:00

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**FM: Risk Management**

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**Unit 1: Introduction**

Topic 1: Orientation and Administration .....	1:00
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**Unit 2: Risk Management Definitions, Perceptions, and Data**

Topic 1: Definitions .....	1:30
Topic 2: Probability Verses Consequences Model .....	2:00
Topic 3: Risk Management Perceptions .....	2:30
Topic 4: Data Used to Analyze Risk .....	2:00

**Unit 3: Risk Management Profiles and Programs**

Topic 1: Community Risk Profiles .....	6:00
Topic 2: Creating a Risk Management Solution or Program .....	3:00
Topic 3: Implementing a Risk Management Solution or Program .....	4:00
Topic 4: Evaluating a Risk Management Solution or Program .....	1:30

**Course:** FM – Managing the Fire Prevention Program**CFSTES****Hours:** 39:15 (36:15 = instruction / 3:00 = testing)**Designed For:** [text]

**Description:** Upon completion of this course, the student will be equipped with an overview of the role of Fire Marshal, information about employee/management relations and have the practical skills to develop and administer: a professional development program, an inspection program, a plan review program, an interpretation process, alternative compliance, an appeals program, a program for permits, licenses, and certificates of occupancy, a records retention program, a hazard reconciliation process, an inter-agency coordination program, and be able to develop and adopt codes and jurisdictional standards.

**Prerequisites:** [text]**Passing Criteria:** 80%**Certification:** [text]**Class Size:** [text]**Restrictions:** [text]

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
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REQUIRED INSTRUCTOR MATERIALS		EDITION	VENDORS
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VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		<a href="http://sft.fire.ca.gov">http://sft.fire.ca.gov</a>

### MANAGING THE FIRE PREVENTION PROGRAM COURSE SYLLABUS

Course Objectives: to provide the student with...

- An overview of the role of the Fire Marshal
- Practical skills for developing a professional development program
- Information about employee/management relations
- Practical skills for developing and adopting codes and jurisdictional standards
- Practical skills for developing and administering an inspection program
- Practical skills for developing and administering a plan review program
- Practical skills for developing and administering interpretation processes, alternative compliance, and appeals programs
- Practical skills for developing and administering a program for permits, licenses, and certificates of occupancy
- Practical skills for developing and administering a records retention program
- Practical skills for developing and administering a hazard complaint reconciliation process
- Practical skills for developing and administering an inter-agency coordination program

Course Content ..... 36:15

### Unit 1: Introduction

Topic 1: Orientation and Administration .....	1:00
Terminal Learning Objective (TLO): At the end of this topic, the student will be able to	
Enabling Learning Objectives (ELO):	
Discussion Questions	
1. [text]	
Activities	
1. [text]	
Evaluation: Formative Test, Summative Test	

## **Unit 2: The Role of the Fire Marshal (CTS: 1-1)**

Topic 1: The Role of the Fire Marshal .....	1:00
Terminal Learning Objective (TLO): At the end of this topic, the student will be able to describe the role of the Fire Marshal including the Fire Marshal's inter-organizational and intra-organizational relationships.	
Enabling Learning Objectives (ELO):	
1. Describe the mission of fire prevention	
2. Describe the role of the Fire Marshal, including:	
• Administrative services and duties	
• Human resource management	
• Community and government relations	
• Inspections and investigations	
• Risk management	
• Professional development	
• Regulatory programs	
• Fire and life safety education	
3. Describe the role of the fire marshal in the inter- and intra-organizational relationships of the fire department, including:	
• Inter-organizational	
○ Within the jurisdiction (building department, planning department, public works, human resources, finance, police department)	
○ Outside the jurisdiction (county, state, and federal agencies, community groups and organizations)	
• Intra-organizational	
○ Operations	
○ Training	
○ Emergency medical services	
○ Public information	
○ Administration	
○ Emergency management	
Discussion Questions	
1. What is the role of the Fire Marshal in your particular jurisdiction?	
2. How does your jurisdiction differ from larger (or smaller) jurisdictions?	
Activities	
1. To be determined by instructor.	
Evaluation: Formative Test, Summative Test	

Topic 2: Administrative Services and Duties.....	2:00
Terminal Learning Objective (TLO): At the end of this topic, the student will be able to identify the Fire Marshal's administrative services and duties.	

Enabling Learning Objectives (ELO):

1. Identify the administrative services and duties assigned or designated by the jurisdiction to the Fire Marshal, including:
  - Planning, organizing, directing, and controlling the division
  - Identifying strategic and operational planning needs
  - Administering and supervising:
    - Fire education
    - Inspections
    - Investigations
    - Plan review
    - Code enforcement
  - Budgeting and resource allocation
  - Resource and record keeping
    - Code books, standards, technical documents, etc.
    - Employment records, budgets, incident reports, etc.
  - Technical decision-making related to laws, policies, and ordinances

Discussion Questions

1. What are some of the budgetary challenges that fire departments currently face?
2. How do these budgetary challenges specifically impact the fire prevention bureau?
3. How does your agency meet the legal mandates for records retention?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 3: Human Resource Management ..... 1:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to identify the role of the Fire Marshal in human resource management.

Enabling Learning Objectives (ELO):

1. Identify the role of the Fire Marshal in human resource management, including:
  - Making personnel assignments
  - Developing employee/management relations and programs
  - Developing professional fire prevention staff
  - Conducting and overseeing job performance evaluations
  - Understanding employment-related legal responsibilities
  - Recruiting, hiring, and promoting professional staff
2. Identify the pros and cons of sworn vs. civilian personnel, including:
  - Personnel assignments
  - Salaries and benefits
  - Employee recruitment and retention

Discussion Questions

1. What resources are available to the Fire Marshal to assist with human relations programs and problems?
2. What are the benefits of "sworn" fire prevention personnel?
3. What are the benefits of civilian personnel conducting plan review and code enforcement?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 4: Community and Government Relations ..... 1:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to identify the role of the Fire Marshal in community and government relations.

Enabling Learning Objectives (ELO):

1. Identify the role of the Fire Marshal in community and government relations, including:
  - Planning legislative activities
  - Communicating public problems
  - Proposing code changes
  - Testifying at hearings
  - Responding to inquiries
  - Identifying the need for and preparing community outreach programs
  - Conveying a message to the community
  - Receiving and evaluating public feedback
  - Understanding the importance of community leadership
  - Serving as a bridge between government and the community by sharing community needs with government officials and educating the community about government mandates during the enforcement process

Discussion Questions

1. What types of community relations issues do most fire departments face?
2. What community groups in your jurisdiction can you utilize to convey a message to the public?
3. What types of issues might require the Fire Marshal to "testify" before the city or county council?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 5: Inspections and Investigations .....0:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to identify the role of the Fire Marshal in inspections and investigations.

Enabling Learning Objectives (ELO):

1. Identify the role of the Fire Marshal in inspections and investigations, including:
  - Administering an inspection program
  - Mandated and non-mandated inspections
  - Standby fire safety officers
  - Fire origin and cause determination
  - Arson investigative processes

Discussion Questions

1. What are some of the circumstances that may require fire safety officer stand-by?
2. Does your agency conduct criminal arson investigations?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 6: Risk Management .....0:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to identify the role of the Fire Marshal in risk management.

Enabling Learning Objectives (ELO):

1. Identify the role of the Fire Marshal in risk management, including:
  - Definition of risk management
  - Purpose of risk management
    - Risk mitigation and reduction
    - Incident prevention
    - Code development
    - Identify public education needs
  - Data gathering and examination

- Development of a Risk Management Program
  - Pre-fire planning
  - Fire loss
  - Hazardous materials
  - Wildland urban interface
  - Injury
  - Disaster preparedness (disaster resistance)

Discussion Questions

1. What is risk management?
2. How does the fire prevention bureau influence fire and life safety risk?
3. Where can data can you collect to assist with identifying the specific risks in your jurisdiction?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 7: Professional Development .....0:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to identify the role of the Fire Marshal in professional development for fire prevention personnel.

Enabling Learning Objectives (ELO):

1. Identify the role of the Fire Marshal in professional development, including:
  - Professional development needs
    - Purpose of professional development
    - Identify and prioritize professional development needs
  - Professional development programs
    - Selecting, recommending, or implementing a professional development program
    - Key components of a successful professional development program
  - Professional development evaluation and forecasting
    - Evaluate the effectiveness of a professional development program
    - Importance of evaluating and forecasting organizational professional development needs
    - Process for evaluating and forecasting professional development needs

Discussion Questions

1. What are some of the professional development certification programs specific to fire prevention?
2. Does your jurisdiction offer educational incentives? (Tuition reimbursement, pay increase for degrees or certifications, etc.)

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 8: Regulatory Programs .....0:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to identify the role of the Fire Marshal in regulatory programs.

Enabling Learning Objectives (ELO):

1. Identify the role of the Fire Marshal in regulatory programs, including:
  - Adopting the California Building Standards Code
  - Adopting and modifying codes and standards at the local level
    - Timeframes for adopting and modifying codes at the local level
    - Considerations for adopting and modifying codes, standards, ordinances, or resolutions at the local level
    - How to adopt and modify codes, standards, ordinances, or resolutions at the local level
  - Maintaining codes and standards at the local level
    - How to maintain local codes, standards, ordinances, or resolutions

- Inspection program considerations
- Developing and administering a plan review program
  - Plan review development
  - Plan review resources
  - Plan review management
- Appeals and alternate means of protection

Discussion Questions

1. What are some issues at the local level that require local ordinance adoption?
2. How does your agency interact with the Building Department? Is there any overlap?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 9: Fire and Life Safety Education.....1:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to identify the role of the Fire Marshal in fire and life safety education.

Enabling Learning Objectives (ELO):

1. Identify the role of the Fire Marshal in fire and life safety education, including:
  - Community leadership and interaction
  - Developing a public fire and life safety education program
    - Developing safety proposal presentations
    - Creating public fire and life safety reports

Discussion Questions

1. What are some contemporary ways of reaching the public with an educational message? (Facebook, Twitter, other social networks?)

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

**Unit 3: Developing a Professional Development Program (CTS: 2-10)**

Topic 1: Professional Development Needs .....1:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to describe the purpose of professional development and identify and prioritize professional development needs within the organization.

Enabling Learning Objectives (ELO):

1. Describe the purpose of professional development, including:
  - To meet organizational needs
  - To meet individual training needs
  - To create consistency within the organization
  - Succession planning
  - Employee incentive
2. Describe how to identify and prioritize professional development needs, including:
  - Conducting research to determine if training meets:
    - job performance requirements
    - organizational goals and objectives
    - jurisdictional needs
    - local, state, federal mandates

Discussion Questions

1. What are some examples of formal professional development programs specifically for the fire service?

2. How do budgetary constrictions affect professional development?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 2: Professional Development Programs .....1:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to select, recommend, or implement a successful professional development program.

Enabling Learning Objectives (ELO):

1. Describe the considerations that go into selecting, recommending, or implementing a professional development program, including:

- Training availability
- Cost effectiveness
- Instructional delivery model
- Delivery timeframe
- Funding source (employee vs. department)
- Employee buy-in
- Job specifications
- Union-related issues
- Human resource-related issues
- Continuing education considerations

2. Describe the key components of a successful professional development program, including:

- Job-relatedness
- Performance-based
- Meets employee and organizational needs
- Incorporates adult learning principles
- Measureable results

Discussion Questions

1. Is experience equivalent to a degree?

2. How would you foster employee buy-in for your professional development program?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 3: Professional Development Evaluation and Forecasting .....0:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to evaluate a professional development program and forecast organizational professional development needs.

Enabling Learning Objectives (ELO):

1. Describe how to evaluate the effectiveness of a professional development program, including whether or not it:

- Meets legal mandates
- Meets jurisdictional needs
- Meets training and development objectives such as:
  - Employee participation and reaction
  - Employee learning
  - Changed on-the-job behavior
  - Increases in quality and quantity
  - Chief happiness ratio

2. Describe the importance of evaluating and forecasting organizational professional development needs, including:

- Budgeting

- Meeting future training needs
  - Anticipate trends
  - Anticipate future staffing needs
  - Anticipate legislative or regulatory changes
  - Reduce liability
3. Describe the process for evaluating and forecasting professional development needs, including:
1. Conducting research
  2. Gathering data and feedback
  3. Evaluating resources
  4. Evaluating trends and emerging technologies

Discussion Questions

1. How would you evaluate a subordinate on a topic unfamiliar to you?
2. How does your agency address succession planning professional development?

Activities

1. Conduct a training needs/task analysis for your agency.

Evaluation: Formative Test, Summative Test

#### **Unit 4: Employee/Management Relations (CTS: 2-3)**

Topic 1: Employee/Management Relations.....1:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able evaluate the character of an organization and the elements that support positive employee/management relations.

Enabling Learning Objectives (ELO):

1. Describe how to evaluate the character of an organization using defining factors, including:
  - Organizational communication
  - Organizational image
  - Organizational leadership
  - Organizational priorities
  - Vision, mission, and values
2. Describe the elements that support positive and participative employee/management relations, including:
  - An atmosphere of unity and harmony
  - Joint initiatives that support department goals and member needs
  - Regularly scheduled, proactive meetings
  - Shared decision-making and problem-solving
  - Shared vision and mission

Discussion Questions

1. What are the similarities and differences between vision statements, mission statements, and values?
2. Does your jurisdiction currently have a vision, mission and values statement for the fire prevention bureau?

Activities

1. Write a mission, values and vision statement for the fire prevention bureau of your agency.

Evaluation: Formative Test, Summative Test

Topic 2: Communication and Decision-Making.....1:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to describe various communication models and processes of organizational decision-making.

Enabling Learning Objectives (ELO):

1. Describe various communication models, including:
  - Sender/Receiver
  - Continuous loop

- Transmission
  - Co-orientation
  - Shared experience
  - Transcendental
  - Hub
2. Describe the process of organizational decision-making, including:
- Decision-making priorities
    - Political
    - Economic
    - Safety
    - Social
    - Efficiency
  - Decision-making styles
    - Democratic
    - Autocratic
    - Collective-participative
    - Consensus
  - Decision-making models
    - Rational
    - Intuitive
    - Rational-iterative
    - 5, 6, 7, and 9-step

#### Discussion Questions

1. Which communication model does the fire service most commonly employ?
2. What is your preferred personal decision-making style?
3. Do decisions made in emergency situations differ from decisions made in the fire prevention bureau?

#### Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

### Topic 3: Conflict Resolution .....0:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to describe management styles and steps used to resolve conflict.

Enabling Learning Objectives (ELO):

1. Describe management styles used to resolve conflict, including:
  - Avoiding
  - Accommodating
  - Collaborating
  - Forcing
  - Negotiating
2. Describe the steps used to resolve conflict, including:
  - Defining or diagnosing the problem
  - Identifying and classifying the problem
  - Determining appropriate conflict management style to be used
  - Communicating throughout the process
  - Identifying potential resolutions
  - Choosing a resolution
  - Converting decision to action
  - Testing the action against the desired result

#### Discussion Questions

1. What is the goal of conflict resolution?
2. Is conflict always negative?
3. Can you provide an example of a positive outcome as a result of conflict resolution?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

## **Unit 5: Developing and Adopting Code and Jurisdictional Standards (CTS: 6-1)**

Topic 1: CBS Code Adoption Process.....1:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to describe the California Building Standards code adoption process.

Enabling Learning Objectives (ELO):

1. Describe the California Building Standards code adoption process:
  - Triennial code cycle
  - State agencies prepare amendments to model code
  - Submit amendment to California Building Standards Commission (CBSC)
  - 45-day public comment period and public hearings
  - CBSC approves amendments and forwards to publisher
  - Code becomes effective 180 days after publication
  - California Building Standards codes only apply to state-regulated occupancies and buildings

Discussion Questions

1. What is the difference between legislation and regulation?
2. How can local jurisdictions participate in the California Building Standards Code adoption process?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 2: Adoption and Modification at the Local Level.....3:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to adopt and modify codes, standards, ordinances, or resolutions at the local level.

Enabling Learning Objectives (ELO):

1. Describe when to adopt and modify codes at the local level:
  - To apply CBS codes to non-state-regulated occupancies and buildings
  - To amend CBS codes at the local level
  - To create new codes at the local level (must meet state minimums)
  - Cannot modify code related to:
    - L occupancies
    - Public schools
    - Residential care facilities (6 or less)
2. Describe considerations for adopting and modifying codes, standards, ordinances, or resolutions at the local level:
  - Intent, purpose, and scope
  - Clearly defined and concise language
  - Coordination with other inter- and intra-jurisdictional departments or agencies
  - Uniformity and consistency with state and regional groups and stakeholders
  - Facts, trends, and high risk areas
  - NFIRS fire loss data, local fire loss, and origin and cause fire investigation reporting
  - Statistical analysis
  - Legal obligations, including but not limited to:
    - Attorney General's Opinion, City of Pasadena (01-306)

- Attorney General's Opinion, Mendocino Fire Protection District (97-516)
  - Hall vs. City of Taft (1956)
  - Mission Development/Castle Construction vs. City of Vallejo (1994 / AB 2983 / HSC 18945(c))
  - Widmar vs. City of Marysville (1984 / HSC 13146.2)
3. Describe how to adopt and modify codes, standards, ordinances, or resolutions at the local level:
- Review agency's statutory authority
  - Establish facts and findings
    - California Building Standards only (HSC 17958.5)
    - Geographical, topographical, climatic
    - Must file facts and findings and final amendment with CBSC before it takes effect
  - Follow Administrative Procedures Act (5 U.S.C. 551) rule-making process
  - Draft language and adoption resolution
  - Present to appropriate governing bodies
  - Public hearing process
  - Formal adoption by governing bodies
  - Special districts amending California Building Standards must have amendments ratified by impacted regions (town, city, etc.)
    - Region's governing body can further modify
  - Place into local code
  - Effective 30-days after final adoption/ratification by all governing bodies

Discussion Questions

1. Can a local jurisdiction change the criteria for compliance with high rise provisions of the code in buildings less than 75 feet in height?
2. Why do local codes have to be adopted by ordinance every three years when the state amends the California codes?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 3: Maintenance at the Local Level .....0:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to maintain codes, standards, ordinances, or resolutions at the local level.

Enabling Learning Objectives (ELO):

1. Describe how to maintain local codes, standards, ordinances, or resolutions:
  - Erratum (minor updates to correct errors)
  - Revisions between formal code cycles
  - Emergency amendments
  - Removal if adopted at the state or national level

Discussion Questions

1. Can you give an example of an emergency amendment?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

**Unit 6: Developing and Administering an Inspection Program (CTS: 4-1 and 6-2)**

Topic 1: Inspection Program Elements .....1:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to develop and administer an inspection program.

Enabling Learning Objectives (ELO):

1. Describe the elements of an inspection program:

- Budget
- Equipment and materials
- Documentation
- Staffing
- Timeframes (turnaround time)
- Workflow (process)

Discussion Questions

1. To be determined by instructor.

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 2: Inspection Program Considerations .....2:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to describe the considerations that go into developing an inspection program.

Enabling Learning Objectives (ELO):

1. Describe the considerations that go into developing an inspection program, including:

- Staff assignments (prevention bureau vs. engine company)
- Geographical areas of responsibility
- Occupancy-specific inspection types
- Building-specific inspection types
- Mandated vs. non-mandated inspections
- Target hazards
- Inspection frequency
- Fire protection equipment and systems
  - New construction
  - Existing systems
- New construction
- Logistics (engine parking, etc.)
- Managing inspection outcomes
- Fire watch (non-fire department personnel)
- Fire safety officer standby (fire department personnel)
- Political environment

Discussion Questions

1. How does your jurisdiction prioritize inspections?
2. How would you differentiate inspections assigned to engine companies from inspections assigned to the fire prevention bureau?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 3: State-Mandated Inspections .....0:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to identify the legislative requirements and local agency responsibilities for state-mandated inspections.

Enabling Learning Objectives (ELO):

1. Identify the types of state-mandated annual inspections:

- Organized camps (HSC 18897.5)
- High-rise (excluding hospitals) (HSC 13217)
- Hotels, motels, and apartments (HSC 17921(b))
- Jails and prisons (HSC 13146.1)

- Schools (K-12) (HSC 13146.3)
- 2. Identify local agency responsibilities for inspections within limited statutory authority facilities:
  - County (jails, facilities in municipality jurisdictions)
  - State (HSC 13108)
  - Federal (hazmat minus DOD / 42 USC 11022)
  - Other (sovereign nation)
  - Public utility (PUC) (mining of a wine cave, fixed skyway transit systems, dams) (section)
  - Special districts

Discussion Questions

1. What are the implications of ignoring the requirement to inspect certain occupancies on an annual basis?
2. Can a local fire department inspect a state-owned occupancy or a federal building?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 4: Documents and Citations .....0:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to describe the documents associated with an inspection program and develop a citation program.

Enabling Learning Objectives (ELO):

1. Describe the documents associated with an inspection program, including:
  - Checklists
  - Citation notices
  - Inspection forms
  - Inspection reports
  - Permit forms
  - Referral forms
  - Notice and orders
  - Stop-work orders
  - Invoices
2. Describe the process for developing a citation program, including:
  - Contacting appropriate court system to determine procedures and requirements
  - Developing organizational policy and procedure
  - Adopting bail and fee schedules
  - Creating relevant forms
  - Training personnel to implement

Discussion Questions

1. What are the pros and cons of inspection checklists?
2. Are there specific training requirements associated with issuance of citations?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 5: Special Inspections .....0:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to identify inspection responsibilities associated with healthcare facilities and hazardous material occupancies.

Enabling Learning Objectives (ELO):

1. Identify inspection responsibilities related to the STD 850 form:
  - HSC 13235
  - Centers for Medicare and Medicaid Service (CMS)
  - Department of Public Health (DPH)

2. Describe the three levels of involvement with the Certified Unified Program Agency (CUPA):

- Manage all of the six CUPA programs
  - Business Emergency Plans (BEP)
  - California Fire Code HazMat (HMIS / HMMP)
  - Underground storage tanks (USTs)
  - Aboveground storage tanks (ASTs)
  - Hazardous Waste
  - CalARP (Accidental Release Program)
- Manage some, but not all, CUPA programs as a participating agency
- No CUPA involvement at all
  - Still responsible for California Fire Code enforcement and permitting

Discussion Questions

1. When do local fire departments have the authority to inspect hospitals and healthcare facilities?
2. What is the difference between a CUPA permit and a Fire Code permit?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 6: Exterior Hazard Abatement in the Wildland Urban Interface .....0:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able develop and administer an exterior hazard abatement program in the wildland urban interface.

Enabling Learning Objectives (ELO):

1. Describe how to develop and administer an exterior hazard abatement program in the wildland urban interface, including:
  - Developing and adopting local ordinance language to enable an exterior hazard abatement program
  - Developing and administering an exterior hazard abatement program, including:
    - Developing and maintaining abatement standards
    - Issuing legal notices
    - Completing compliance inspections
    - Noting and documenting deficiencies
    - Following up on abatement procedures

Discussion Questions

1. What is a wildland urban interface?
2. Is a wildland urban interface always associated with a fire hazard severity zone?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

## **Unit 7: Developing and Administering a Plan Review Program (CTS: 6-3)**

Topic 1: Plan Review Program Development.....0:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to develop and administer a plan review program.

Enabling Learning Objectives (ELO):

1. Develop and administer a plan review program, including:
  - Budget
  - Equipment and materials
  - Documentation
  - Staffing
  - Timeframes (turnaround time)

- Workflow (process)

Discussion Questions

1. What are the implications of failing to meet turnaround times?
2. Can unlicensed plan reviewers review the work of licensed architects and engineers?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 2: Plan Review Resources.....0:15

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to manage a library of codes, standards, ordinances, and checklists for plan review.

Enabling Learning Objectives (ELO):

1. Describe how to manage a library of codes, standards, ordinances, and checklists necessary to perform an adequate plan review, including:
  - Current codes, standards, ordinances, and checklists
  - Archives to access code edition in effect at time of a building's:
    - Project entitlement date
    - Plan review submittal date
    - Conditions of approval
    - Legal agreement
    - Tenant improvement

Discussion Questions

1. Why is it important to have access to the codes that were in effect at the time the building was built?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 3: Plan Review Management.....0:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to review and approve policies and procedures for administering plan review functions, plan review checklists, and forms created by a plans examiner.

Enabling Learning Objectives (ELO):

1. Review and approve policies and procedures for administering plan review functions, including, but not limited to:
  - Third-party plan review services
  - Electronic plan review programs
  - Interagency coordination and record keeping
  - Design-build delivery models
  - LEED (Leadership in Energy and Environmental Design)
  - Alternate means of protection
  - Alternate method of compliance
2. Review and approve plan review checklists and forms created by the plans examiner

Discussion Questions

1. When plans are reviewed by a third-party reviewer, who is responsible for reviewing and approving changes to the approved plans?
2. Who has the authority to approve alternate methods of compliance/protection?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

**Unit 8: Developing and Administering Interpretation Processes, Alternative Compliance, and Appeals**

**Programs (CTS: 6-4)****Topic 1: Interpretation.....0:30**

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to describe the interpretation and code clarification process.

Enabling Learning Objectives (ELO):

1. Describe interpretation and its purpose:
  - Authority: California Building Code 104.1
  - A fire official's formal opinion of the application of a regulation
  - Uniform regulation application within a jurisdiction
2. Describe the interpretation and code clarification process, including:
  - Considering the use of subject-matter experts
  - Determining the intent of performance-based design
  - Researching and defining the intent of prescriptive codes and standards
  - Developing interpretations
  - Adopting or following policies and procedures to provide access to interpretations

Discussion Questions

1. Are the formal interpretations of an agency required to be made available to the public?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

**Topic 2: Alternative Compliance Methods.....1:00**

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to develop a jurisdictional process for alternative methods of compliance.

Enabling Learning Objectives (ELO):

1. Describe alternative methods of compliance and their purpose, including:
  - Authority: California Building Code 104.11
  - Installation of any material or any design or method of construction not specifically prescribed by code
  - Allowing new materials, methods, or technologies
  - Examining proposed alternatives from a performance-based standpoint
2. Develop a jurisdictional process for alternative methods of compliance, including:
  - Considering the use of design professional peer review
  - Considering the use of subject-matter experts
  - Requesting research reports or specialized tests
  - Recognizing practical difficulties
  - Reviewing alternate methods and materials
  - Determining equivalency with prescriptive code
  - Recovering costs

Discussion Questions

1. Does approval of an alternate method of compliance/protection set a precedent for future projects?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

**Topic 3: Appeals Process.....1:00**

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to describe appeals, identify when to submit them, and develop and implement an appeals process.

Enabling Learning Objectives (ELO):

1. Describe appeals and their purpose

- Authority: CCR Title 19, section 2.03
  - An application to a recognized authority for vindication, corroboration, or decision
  - An individual can appeal if he or she does not agree with an order, decision, or determination made by a fire official
  - Appeals go through the procedure based on regulation in each jurisdiction
2. Identify to which office one should submit appeals
    - Appeals to orders, decisions, or determinations in a non-state-regulated occupancy = local fire marshal office
    - Appeals to orders, decisions, or determinations of a state fire marshal regulation in a state-regulated occupancy or building = state fire marshal office
  3. Describe how to develop and implement an appeals process, including:
    - Establishing the administrative process
      - Equipment and materials
      - Documentation
      - Staffing
      - Timeframes (turnaround time)
      - Workflow (process)
    - Identifying an appeals board
    - Developing hearing procedures
    - Documenting a resolution
    - Cost recovery

#### Discussion Questions

1. Should you modify formal interpretations if they are appealed?
2. What are reasonable timeframes for completion of appeals?

#### Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

### **Unit 9: Developing and Administering a Program for Permits, Licenses, and Certificates of Occupancy** (CTS: 6-5)

Topic 1: Permits, Licenses, and Certificates of Occupancy .....1:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to develop, administer, and enforce regulations related to permits, licenses, and certificates of occupancy.

Enabling Learning Objectives (ELO):

1. Describe how to develop and administer a process to evaluate licenses and issue permits and certificates of occupancy, including:
  - Evaluating the legal process
  - Establishing the administrative process
  - Staffing
  - Timeframes (turnaround time)
  - Workflow (process)
  - Cost recovery measures
2. Describe how to enforce permit regulations in accordance with the policies of the jurisdiction and applicable codes and standards, which at a minimum shall include:
  - Evaluating the legal authority for permit issuance and revocation
  - Cost recovery measures
  - Conduct inspection
  - Cite violations
  - Assess penalties (revocation being one of them)
  - Issue stop work orders

Discussion Questions

1. How should you handle certificates of occupancies on projects with phased completion schedules?
2. Under what circumstances should you issue a stop work order? How is it lifted?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

## **Unit 10: Developing and Administering a Records Retention Program (CTS: 6-6)**

Topic 1: Types of Records Retention Systems ..... 1:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to describe types and elements of retention systems, retention requirements for different fire prevention document and programs, the protocol for accessing public records, and develop and administer a records retention system.

Enabling Learning Objectives (ELO):

1. Describe the types of retention systems, including:
  - Archival
  - Digital files
  - Hard-copy files
  - Microfiche files
2. Describe the retention requirements for various fire prevention documents and programs, including:
  - Federal
  - State
  - Local
3. Describe the protocol for accessing public records, including:
  - Criteria involving trade secrets
  - Legal review for authorization to release
    - Freedom of Information Act
    - Criminal records
    - Records involving victims or minors
  - Requesting procedures
4. Describe the elements of a records retention system, including:
  - Alternate material and methods approvals
  - Annual reports of activities
  - Fire reports
  - Hazardous materials release and exposure reports
  - Inspection reports, forms, and letters
  - Interpretations
  - Ordinances
  - Origin and cause fire investigation reports
  - Permits and certificates that have been issued
  - Plan review comments, approvals, and drawings
  - Policy and procedures manual
  - Resolutions
  - Summons
  - Violation letters
5. Describe the procedures for developing and administering a records retention system, including:
  - Equipment and materials
  - Space management
  - Security
  - Staffing

- Timeframes (turnaround time)
- Timeframes for destroying or purging records
- Workflow (process)

Discussion Questions

1. Does your department have a records retention policy?
2. If so, how long does it require fire prevention records to be retained?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

## **Unit 11: Developing and Administering a Hazard Complaint Reconciliation Process (CTS: 6-7)**

Topic 1: Developing a Process for Reconciling Hazard Complaints .....1:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to develop and administer a process for reconciling hazard complaints.

Enabling Learning Objectives (ELO):

1. Describe how to develop an administrative process for reconciling hazard complaints, including:
  - Creating policies and procedures
  - Developing a method for evaluating complaints
  - Developing forms and tracking systems
  - Establishing a referral process to other agencies or departments
  - Establishing methods for resolving complaints
2. Describe the procedures for ratifying or modifying decisions of subordinates ahead of an appellate process

Discussion Questions

1. How does your fire prevention division process and track hazard complaints?
2. What criteria does your fire prevention division use to prioritize complaints?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

## **Unit 12: Developing and Administering an Inter-Agency Coordination Program (CTS: 6-8)**

Topic 1: Administering an Inter-Agency Coordination Program .....2:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to develop and administer a program to coordinate with other agencies.

Enabling Learning Objectives (ELO):

1. Describe the procedures for administering a program to coordinate with other agencies, including:
  - Developing memoranda of understanding between agencies
  - Negotiating and resolving conflicts between agencies
  - Recognizing and researching jurisdictional limitations
  - Researching other agencies' jurisdictional responsibilities

Discussion Questions

1. Can you describe some scenarios in which developing a memorandum of understanding would be beneficial? Why?

Activities

1. Given a topic of conflict between the fire department and another city agency, identify the stakeholders, their position, and what strategies could be used to resolve the issue.

Evaluation: Formative Test, Summative Test

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**MANAGING THE FIRE PREVENTION PROGRAM COURSE SYLLABUS**

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Summative Testing .....	1:00
Formative Testing.....	2:00

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**Course:** FM – Public Relations, Education and Fire Investigation

CFSTE

**Hours:** 27:00 (24:00 = instruction / 3:00 = testing)**Designed For:** [text]

**Description:** Upon completion of this course, the student will be equipped with information about the Fire Marshal's role in community leadership and interaction, practical skills for developing and implementing a public fire and life safety education program, practical skills for developing administrative policies, assembling resources, reporting on fire investigations, and practical skills for carrying out fire origin and cause investigations and criminal fire investigations.

**Prerequisites:** [text]**Passing Criteria:** [text]**Certification:** [text]**Class Size:** [text]**Restrictions:** [text]

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪			
▪			
▪			
REQUIRED INSTRUCTOR MATERIALS		EDITION	VENDORS
▪			
▪			
▪			
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		<a href="http://sft.fire.ca.gov">http://sft.fire.ca.gov</a>

**PUBLIC RELATIONS, EDUCATION, AND FIRE INVESTIGATION COURSE SYLLABUS**

Course Objectives: to provide the student with...

- Information about the Fire Marshal's role in community leadership and interaction
- Practical skills for developing and implementing a public fire and life safety education program
- Practical skills for developing administrative policies, assembling resources, reporting on fire investigations
- Practical skills for carrying out fire origin and cause investigations and criminal fire investigations

Course Content ..... 24:00

**Unit 1: Introduction**

Topic 1: Orientation and Administration ..... 1:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to

Enabling Learning Objectives (ELO):

Discussion Questions

1. [text]

Activities

1. [text]

Evaluation: Formative Test, Summative Test

**Unit 2: Community Leadership (CTS: 3-2)**

Topic 1: Community Leadership and Interaction .....2:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to describe the role of the fire marshal as a community leader and the importance and opportunities for creating meaningful community relationships.

Enabling Learning Objectives (ELO):

1. Describe the role of the fire marshal as a community leader, including:
  - Authority figure
  - Subject matter expert
  - Economic vitality
  - Community vision
  - Liaison
  - Problem solver
2. Describe the importance of creating meaningful relationships with community groups
  - Fosters community support for fire services
  - Establishes and maintains ongoing contacts
  - Strengthens communication
  - Fund-raising opportunities / philanthropy
  - Promotes fire and life safety education
3. Describe opportunities for community interaction, including:
  - Attending community meetings
    - Public meetings (fire board, city council, etc.)
    - Social or philanthropic meetings (Kiwanis, Rotary, Boy Scouts, etc.)
  - Participating in community events (Street fairs, art festivals, parades, etc.)
  - Fire prevention week
  - Volunteerism
  - Social media (Twitter, Facebook, etc.)

Discussion Questions

1. What are some of the ways you can use Twitter or Facebook to interact with the community?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

**Unit 3: Developing and Implementing a Public Fire and Life Safety Education Program (CTS: 7-1 and 7-2)**

Topic 1: Developing a Public Fire and Life Safety Education Program .....1:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to develop, implement, and evaluate a public fire and life safety education program.

Enabling Learning Objectives (ELO):

1. Describe the process for developing a public fire and life safety education program, including:
  - Collecting and evaluating data/feedback
  - Evaluating all-risk community concerns
  - Identifying and prioritizing problems
  - Establishing goals and objectives
  - Determining budget and resource constraints
  - Identifying solutions and alternatives
  - Establishing collaborative partnerships with community groups, businesses, other governmental agencies
  - Educating department personnel of their role within the organization's fire and life safety

education strategy

2. Describe the process for implementing the program, including:
  - Program administrative issues
  - Stimulating interest in the community
  - Utilizing local media
3. Describe the process for evaluating the outcomes, including:
  - Identifying loss reduction
  - Identifying risk reduction
  - Measuring outcomes against goals and objectives and interpret results
  - Soliciting feedback from participants
  - Determining the need for program modification

#### Discussion Questions

1. How would you select the personnel who will present a fire and life safety education program?
2. Why is it important to familiarize and educate department personnel on their role within the education program strategy?

#### Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

### Topic 2: Developing a Safety Proposal Presentation .....4:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to develop and demonstrate a safety proposal presentation to a community group.

#### Enabling Learning Objectives (ELO):

1. Develop and demonstrate a safety proposal presentation to a community group, including:
  - Explaining the issues or needs
  - Describing proposed solutions, impacts, and benefits
  - Soliciting and receiving feedback
  - Creating community buy-in
2. Describe and demonstrate creating an awareness campaign within an organization
  - Establish strategy to create organizations support
  - Role of organization membership

#### Discussion Questions

1. Why is community buy-in important?

#### Activities

1. Create an awareness campaign to further a fire prevention topic within your organization.
2. Develop a PowerPoint presentation specifying the importance of fuel management in a wildland urban interface environment and the applicable regulations that apply to fuel modification requirements. The target audience for this presentation is a large homeowner association.

Evaluation: Formative Test, Summative Test

### Topic 3: Creating a Comprehensive Public Fire and Life Safety Report .....2:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to create a comprehensive public fire and life safety report.

#### Enabling Learning Objectives (ELO):

1. Describe and demonstrate creating a comprehensive public fire and life safety report for policy makers, including:
  - Identifying the audience
  - Describing the program's
    - Design
    - Educational strategies

- Goals and objectives
- Activities
- Program management
- Resource management
- Outcomes
- Evaluation methods
- Evaluating for clarity, consistency, and conciseness

Discussion Questions

1. How will you measure the outcomes specified in the program goals and objectives?
2. Why is it important to have an evaluation method in place *before* you start a program?

Activities

1. Review the annual fire report for your community and identify the top three causes of fire in your community. Prepare a report for the city council that identifies those causes and recommends a strategy to educate the public on fire safety in these areas.

Evaluation: Formative Test, Summative Test

#### **Unit 4: Fire Investigation Overview (CTS: 8-1)**

Topic 1: Terminology .....0:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to define terminology related to fire investigations.

Enabling Learning Objectives (ELO):

1. Define "origin and cause"
  - The circumstances, conditions, or agencies that bring together a fuel, ignition source, and oxidizer resulting in a fire or combustion explosion. (NFPA 921, section 3.3.57)
2. Define "fire investigation"
  - The process of determining the origin, cause, and development of a fire or explosion. (NFPA 921, section 3.3.59)
3. Define "arson"
  - Willfully and maliciously setting fire to, burning, causing to be burned, or aiding, counseling, or procuring the burning of, any structure, forest land, or property. (California Penal Code 451)
4. Define "unlawful burning"
  - Unlawfully causing a fire by recklessly setting fire to, burning, or causing to be burned any structure, forest land, or property. (California Penal Code 452)

Discussion Questions

1. Why is proper terminology critical when dealing with fire investigations?
2. What is the difference between fire investigation and arson investigation?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

Topic 2: Fire Investigation Types .....2:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to distinguish between different types of fire investigations.

Enabling Learning Objectives (ELO):

1. Describe how to distinguish between different types of fire investigations
  - For reporting purposes only
    - No crime identified
    - Trend identification
    - Risk analysis
  - For a civil case

- Fire caused by product malfunction or failure
- For a criminal case
  - Arson
  - Reckless burning
  - Negligence
  - Murder
  - Burglary
- 2. Describe how each investigation type has different requirements for:
  - Securing a scene
  - Evidence collection and storage
  - External agency or organization involvement

#### Discussion Questions

1. What are some examples of fire investigation for civil law purposes?
2. Should the different types of fire investigations be handled differently?

#### Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

### Topic 3: Developing Administrative Policies .....2:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to develop an administrative policy for fire investigations.

#### Enabling Learning Objectives (ELO):

1. Describe the procedures for developing an administrative policy for fire origin and cause investigations, including:
  - Considering codes, standards, and jurisdictional requirements for investigations including:
    - NFPA 921 – Guide for Fire and Explosion Investigations
    - NFPA 1033 – Standard for Professional Qualifications for Fire Investigators
  - Applying local, state, and federal laws including:
    - California Penal Code
    - Search and seizure case law
  - Applying organizational policies
  - Selecting program components
  - Coordinating with internal and external agencies such as:
    - Other fire departments
    - Law enforcement agencies
    - School districts
    - Local government (cities, counties, etc.)

#### Discussion Questions

1. Are fire investigation policies and procedures “discoverable” in court cases?
2. What are the potential consequences of having no policy or incomplete policies for conducting fire investigations?

#### Activities

1. Compare your jurisdictional policies and procedures with NFPA 1033 to ensure consistency.

Evaluation: Formative Test, Summative Test

### Topic 4: Resources .....1:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to identify and manage resources needed to perform fire investigations.

#### Enabling Learning Objectives (ELO):

1. Identify resources needed to perform fire investigations, including:
  - Personnel

- Status of firefighters as peace officers (California Penal Code 830.37(a))
  - Education and certification requirements
- Jurisdictional requirements
- Protective equipment
  - Coveralls
  - Protective masks and gloves
- Investigation tools
  - Evidence cans
  - Evidence tags
  - Photography equipment
  - Special equipment for digging into debris
  - Lighting equipment
  - Tool kits
  - Hydrocarbon detector
- Resources
  - Law enforcement support
  - Crime lab support
- 2. Describe the procedures for managing resources needed to perform fire investigations, including:
  - Training on report writing policies and procedures
  - Coordinating tasks and people
  - Protecting and equipping investigators
  - Conducting investigations according to jurisdictional policies and procedures
  - Ensuring safety

#### Discussion Questions

1. Should fire investigators be required to wear breathing apparatus during their investigations?
2. Why are evidence cans required to be new and clean before use?

#### Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

### Topic 5: Reports and Analysis .....2:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to review and assess investigation reports and data related to fire investigations.

#### Enabling Learning Objectives (ELO):

1. Describe the procedures for reviewing and assessing investigation reports and data, including:
  - Reviewing for compliance with departmental report writing policies and procedures
  - Reviewing for accuracy, completeness, and verifiability
  - Reviewing for excellent writing techniques, including:
    - Editing out irrelevant material
    - Using correct grammar, spelling, and punctuation
    - Writing from a first-person point of view
    - Avoiding jargon and overly complicated or ambiguous terminology
    - Using paragraphs that are short and to the point
    - Using simple language that reads like the investigator speaks
    - Minimizing opinions, conclusions, and suspicions
    - Maximizing statements of fact and observations that an investigator can prove
  - Anticipating submittal for litigation or resolution
  - Ensuring that report or data content supports report conclusion or findings

#### Discussion Questions

1. How important is effective report writing while conducting fire investigations?
2. Who may read the report?

**Activities**

1. Given a fire report, conduct an analysis and compare the conclusions with supporting documentation to clearly state origin and cause.
2. Given reports compiled from investigation data, conduct an investigative analysis to recommend action to enhance fire prevention or other programs.

Evaluation: Formative Test, Summative Test

**Unit 5: Fire Origin and Cause Investigations (CTS: 8-1)**

Topic 1: Fire Marshal Role in Fire Origin and Cause Investigations ..... 1:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to conduct investigations and monitor investigative actions and administrative follow-up.

Enabling Learning Objectives (ELO):

1. Describe how to conduct investigations
  - Although often done by a fire investigator
  - May also be done by engine company personnel
2. Describe how to approach each fire investigation as a criminal fire investigation until you rule it out, including:
  - Securing the scene
  - Taking care of evidence appropriately
  - After ruling out criminal acts, handling as a regular origin and cause investigation
3. Describe how to monitor investigative actions and administrative follow-up, including:
  - Reviewing and evaluating investigation reports and data
  - Analyzing in context overarching patterns and trends
  - Recommending action to enhance fire prevention and education programs

**Discussion Questions**

1. What are some of the concerns of having engine company personnel conduct origin and cause investigations?
2. What is the role of the private insurance company investigator and how can he or she assist with the fire department origin and cause investigation?

**Activities**

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

**Unit 6: Criminal Fire Investigations (CTS: 8-2)**

Topic 1: Fire Marshal Role in Criminal Fire Investigations ..... 2:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to develop and manage a criminal fire investigation program, identify and develop policies and procedures related to criminal fire investigations, and monitor investigative actions and administrative follow-up.

Enabling Learning Objectives (ELO):

1. Describe how to develop and manage a criminal fire investigation program that:
  - Meets legal mandates
  - Follows jurisdictional policies and procedures
  - Incorporates best practices
  - Prepares case files for presentation to district attorney
  - Is consistent, complete, and safe
  - Trains and equips investigators
  - Ensures a complete investigation
  - Coordinates with other agencies and organizations
2. Describe how to identify and develop policies and procedures related to performing criminal fire

investigations, including:

- Conducting arrests
- Conducting interviews
- Conducting search and seizure
- Carrying fire arms
- Legal authority to conduct investigations
- Investigator training and certification
- Interpreting and using contract and insurance law
- Maintaining chain of custody
- Evidence collection and storage
- Using criminal and civil statutes applicable to the situation
- Forensic analysis and laboratory testing
- Juvenile fire-setter programs
- Fire fatalities

3. Describe how to monitor investigative actions and administrative follow-up

Discussion Questions

1. What are the pros and cons of maintaining an accelerant detection K-9 resource?
2. What is a chain of custody and why is it an important consideration in fire investigations?
3. Should arson investigation be conducted by law enforcement or is it a fire department responsibility?
4. What are the pros and cons of investigators carrying firearms?

Activities

1. Prepare a brief on your jurisdiction's legal authority to conduct investigations, your fire investigator training and certification requirements, and their authority to carry fire arms.

Evaluation: Formative Test, Summative Test

Topic 2: Criminal Fire Investigation Considerations .....2:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to identify laws, regulations, and external agencies and organizations that impact criminal fire investigations.

Enabling Learning Objectives (ELO):

1. Identify and be familiar with laws and regulations that might impact a criminal fire investigation, including:
  - Civil rights laws
  - Fair credit reporting act
  - Laws applicable to the authority having jurisdiction
  - Libel and slander laws
  - Privacy laws
  - Punitive damages and attorney-client privilege laws
  - Rules of evidence, including spoliation
  - Trespass and invasion of privacy laws
2. Identify the roles other agencies and organizations that may be involved with criminal fire investigations, including:
  - Federal Bureau of Investigation
  - Federal Bureau of Alcohol, Tobacco, Firearms, and Explosives
  - Cal Fire / State Fire Marshal
  - Local fire agencies
  - Local law enforcement agencies
  - Forensic laboratories
  - District attorney

Discussion Questions

1. What is the Cal Fire/State Fire Marshal's responsibility as it relates to conducting arson and bomb

investigations?

2. What kind of liability do fire and arson investigators assume?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

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Summative Testing .....	1:00
Formative Testing.....	2:00

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**Course:** FM – Risk Management

CFSTE

**Hours:** 26:30 (23:30 = instruction / 30:00 = testing)**Designed For:** [text]**Description:** Upon completion of this course, the student will be introduced to risk management definitions, perceptions and data and be able to analyze risk data, evaluate risk, create a community risk profile, and create, implement, and evaluate a risk management solution or program.**Prerequisites:** [text]**Passing Criteria:** [text]**Certification:** [text]**Class Size:** [text]**Restrictions:** [text]

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪			
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▪			
REQUIRED INSTRUCTOR MATERIALS		EDITION	VENDORS
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▪			
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▪			
<b>VENDORS</b>			
SFT	State Fire Training Bookstore (916-445-8158)	<a href="http://sft.fire.ca.gov">http://sft.fire.ca.gov</a>	

**RISK MANAGEMENT COURSE SYLLABUS**

Course Objectives: to provide the student with...

- Risk management definitions, perceptions and data
- Practical skills to analyze risk data
- Opportunities to evaluate risk and create a community risk profile
- Opportunities to create, implement and evaluate a risk management solution or program

Course Content ..... 23:30

**Unit 1: Introduction**

Topic 1: Orientation and Administration ..... 1:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to

Enabling Learning Objectives (ELO):

[text]

Discussion Questions

1. [text]

Activities

1. [text]

Evaluation: Formative Test, Summative Test

**Unit 2: Risk Management Definitions, Perceptions, and Data (CTS: 5-1 and 5-2)****Topic 1: Definitions.....1:30**

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to define risk and risk management.

Enabling Learning Objectives (ELO):

1. Define risk
  - The possibility of loss or injury
  - Someone or something that creates or suggests a hazard
2. Define risk management
  - The process of identifying, assessing, and managing risks and making decisions that balance risk factors with mission benefits.
  - The essence of risk management lies in maximizing areas that we have some control over the outcome while minimizing the areas where we have absolutely no control over the outcome and the linkage between cause and effect is hidden from us. (Peter L. Bernstein)

Discussion Questions

1. What is risk management in your community?
2. Where does risk management fit in the "big picture" of your agency?

Activities

1. To be determined by instructor.

Evaluation: Formative Test, Summative Test

**Topic 2: Probability Verses Consequences Model .....2:00**

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to utilize the probability verses consequences model.

Enabling Learning Objectives (ELO):

1. Describe the probability verses consequence model
  - High probability / High consequence (maximum hazard)
    - Emergency medical response, etc.
  - Low probability / High consequence (high hazard)
    - Pandemics, hazardous materials, major flooding, terrorism, earthquakes, WUI conflagration, etc.
  - High probability / Low consequence (moderate hazard)
    - Storms, heavy rains, trip hazards, dumpster fires, yard trash fires, etc.
  - Low probability / Low consequence (remote hazard)
    - Isolated structure fire, ancillary building fire, etc.

Discussion Questions

1. Where do target hazards fall in the probability vs. consequence model?
2. How does fuel management (or lack thereof) in the wildland urban interface alter the probability and consequence outcome?

Activities

1. Prepare a probability model for a planned urban development in a Very High Hazard Severity Zone.

Evaluation: Formative Test, Summative Test

**Topic 3: Risk Management Perceptions.....2:30**

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to describe how risk perception varies by audience.

Enabling Learning Objectives (ELO):

1. Describe different perceptions of risk management, including:
    - Community perception
-

- Hot topics in the media at the time (earthquakes, child abductions, terrorism, floods)
- Can also be very micro (a traffic accident on their street)
- Often don't recognize that they are at risk
- Complacency: "That's why I have insurance"
- Fire service perception
  - There is a probability that a fire or emergency will occur
  - Risk is relative: low to extremely high
- Fire marshal perception
  - Leading community risk reduction is part of the job
  - Identification of risk helps define issues to address
  - Promote mitigation through engineering, education, and enforcement

#### Discussion Questions

1. What is "acceptable risk"?
2. What is "all risk"?
3. What is "special risk"?

#### Activities

1. Have students role play a community policy committee (i.e. chamber representative, homeowners associations, environmental advocate, council/board member, fire chief, fire marshal, developer) topic related to a planned unit development in a Very High Hazard Fire Severity Zone. Each student takes one of various roles. One student facilitates meeting.

Evaluation: Formative Test, Summative Test

#### Topic 4: Data Used to Analyze Risk.....2:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to describe the types of data used to analyze risk.

#### Enabling Learning Objectives (ELO):

1. Describe the types of data most often used to analyze risk, including:
  - Annual reports and records
  - Emergency incident data
  - Facts
  - Trends
  - Target risks
  - Community input
  - Census data
  - Historical records
  - Financial records
  - Regulations
2. Be aware of additional data available to analyze, including information related:
  - Pandemics
    - Center for Disease Control (pandemic plans)
  - Storms/Floods
    - Federal Emergency Management Agency (flood plain maps)
    - National Oceanic and Atmospheric Administration (NOAA)
  - Earthquakes
    - US Geological Survey (USGS)
  - Terrorism (chemical, biological, radiological, nuclear)
    - Federal Bureau of Investigation (FBI)
    - Department of Homeland Security
  - Wildland Urban Interface
    - Fire hazard severity zone maps
    - Hyperspectral imaging maps (fuel types and density)

- Community wildfire prevention plans (CWPP)

Discussion Questions

1. What are two very important sources of data available to most fire agencies? (Computer Assisted Dispatch or communications records and a Records Management System or fire and EMS reports)
2. How would you go about obtaining various reports?

Activities

1. Students complete a matching exercise to identify which reports should be considered for identified risks.

Evaluation: Formative Test, Summative Test

### **Unit 3: Risk Management Profiles and Programs (CTS: 5-1, 5-2, and 5-3)**

Topic 1: Community Risk Profiles .....6:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to define risk profile, describe the components of a community risk profile for general use and as it relates to the urban wildland interface, and develop a community risk profile.

Enabling Learning Objectives (ELO):

1. Define risk profile
  - Describes the types of risks faced by an organization and its exposure to those risks
2. Describe the components of a community risk profile, including:
  - Protection levels
  - Loss history
  - Stakeholder, political, and community perceptions of risk
  - Topography, climate, geology, geography
  - Unique hazards within the community
  - Occupancy types
  - Percent of responses by occupancy types
  - Perception of risk
  - Demographics (age groups, cultural groups, socioeconomic groups)
  - Population density and anticipated growth
  - Construction types
  - Construction features
  - Fire department access
  - Water supply
3. Describe the components of a community risk profile specific to a wildland urban interface, including:
  - Fuel types and density
    - Influence fire behavior (speed and intensity) and define how bad a fire will be
  - Topography and climate
    - Influence fire behavior (speed and intensity) and define how bad fire will be
  - Ignition-resistant construction features
    - Reduce the likelihood of flying embers igniting structures
    - Flying embers more likely to happen in WUI
    - Nature of the fuel burning is more susceptible to becoming airborne
    - Winds associated with these events cause embers to travel farther and find the fuels in non-ignition resistant structures
  - Emergency access egress
    - How easy it is for fire service to get in and people to get out
  - Water supply
    - Potential for no public water supply system
    - Need to use water from swimming pools, private water tanks, rivers, etc.

- Fuel mitigation measures and effectiveness
  - Slows or limits fire spread and reduces likelihood of direct flame impingement on structures

Discussion Questions

1. How can the use of a Geographical Information System (GIS) assist in the assessment of community risk?
2. To what audience should you direct a community risk report?

Activities

1. Prepare a community profile for your jurisdiction. Prepare at least one paragraph as an overall summary. Describe the various levels of risk in the area ranging from commercial and industrial to the generic risk of dwellings and other generic problems. Include a brief review of target hazards or special risks.

Evaluation: Formative Test, Summative Test

Topic 2: Creating a Risk Management Solution or Program .....3:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to analyze community risk profile data, evaluate the effectiveness of existing solutions, classify and prioritize risks, and identify solutions.

Enabling Learning Objectives (ELO):

1. Describe and demonstrate analyzing data from community risk profile
2. Describe and demonstrate evaluating effectiveness of existing solutions
3. Describe and demonstrate classifying risks (probability vs. consequence)
4. Describe and demonstrate prioritizing risks
5. Describe and demonstrate identifying potential solution(s), including:
  - Passive vs. active mitigation
  - Passive: Take steps to reduce the impact of a risk that you cannot control
    - Tsunami evacuation route signs, building placement, fire walls, fuel modification, etc.
  - Active: Take steps to reduce a potential risk before it happens
    - Public notification, immunizations, mechanical smoke control, sprinklers, etc.
6. Describe and demonstrate identifying factors that influence solution(s) selection
  - Political influence
  - Budget and resource considerations
  - Community values and risk tolerance
  - Community and stakeholder buy-in (critical throughout entire process)

Discussion Questions

1. What is another definition for risk mitigation as it relates to the role of Fire Marshal? (focused fire prevention activities)

Activities

1. Complete a Risk Analysis Sheet for the county hospital or large venue assembly in your jurisdiction applying a probability/consequence matrix to your community risk profile.
2. From the risk analysis sheet identify potential solutions and discuss factors that may influence the selection of a recommended solution.

Evaluation: Formative Test, Summative Test

Topic 3: Implementing a Risk Management Solution or Program .....4:00

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to establish performance objectives, develop an implementation plan, and implement solutions.

Enabling Learning Objectives (ELO):

1. Describe and demonstrate establishing performance objectives that are:
  - Specific
  - Measurable
  - Attainable

- Realistic
  - Time sensitive
2. Describe and demonstrate developing an implementation plan that includes:
    - Timeframes
    - Budget
    - Resource allocation
    - Events and meetings
    - Publications
  3. Describe and demonstrate implementing solution(s), including:
    - Adopted codes, regulations, standards
    - Public awareness and media
    - Responder training
    - Citizen training
    - Community evacuation plan
    - Resource management
    - Post incident repopulation

Discussion Questions

1. [text]

Activities

1. Develop an implementation plan for the approval of a new program, piece of legislation, form of public education, or fire safety code.

Evaluation: Formative Test, Summative Test

Topic 4: Evaluating a Risk Management Solution or Program .....1:30

Terminal Learning Objective (TLO): At the end of this topic, the student will be able to evaluate risk management solutions and modify solutions or programs as needed.

Enabling Learning Objectives (ELO):

1. Describe and demonstrate evaluating solution(s), including:
  - Conducting drills
  - Reviewing post-incident data
  - Conducting public surveys or meetings
  - Re-evaluating fuel density
  - Assessing compliance with performance objectives
2. Describe and demonstrate modifying solutions or programs as needed
  - With an effective risk management program, this cycle never stops
  - The fire marshal's office continuously repeats the "analyze, implement, evaluate, revise" process

Discussion Questions

1. When evaluating risk management solutions for effectiveness, why is documentation critical?

Activities

1. Given data showing loss of life in residential occupancies, prepare a comparison showing the effectiveness of residential sprinklers as they relate to fire death and dollar loss reduction. (Example: Automatic Sprinklers: A 10 Year Study, Scottsdale Arizona, [www.homefiresprinkler.org](http://www.homefiresprinkler.org))

Evaluation: Formative Test, Summative Test

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Summative Testing .....	1:00
Formative Testing.....	2:00

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